Annual Drinking Water Quality Report for 2009

TOWN OF ST. Michaels

May 18, 2010

PWSID 0200006

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source is two active wells which draw from an underground source known as the Aquia Aquifer. The depth of our wells are approximately 465 feet. The earth between the surface and this underground aquifer helps to purify the water before it actually reaches the aquifer, making it easier for us to treat before we pump it into our water distribution system.

This report shows our water quality and what it means.

We have a source water protection plan available from our office that provides more information such as potential sources of contamination. This plan is also available through the Talbot County Public Library and from Maryland Department of the Environment (MDE).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions about this report or concerning your water utility, please contact Jeff Richardson at (410) 745-9535. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Mayor and Council meetings which are held on the second Wednesday of each month beginning at 1:00 p.m. at City Hall.

The Town of St. Michaels routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2009, or as otherwise indicated. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - The "Goal"(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants						
Beta/photon emitters Well #2 (2008) Well # 3 (2007)	 N N	 11.0 11.0	pCi/1	0	50	Decay of natural and man-made deposits
Alpha emitters Well #2 (2008) Well # 3 (2007)	 N N	 < 1.0 3.0	pCi/1	0	15	Erosion of natural deposits
Inorganic Contaminants						
Arsenic (quarterly) Well # 2 (average) Well # 3 (average)	 **Y** N	 **12.0** < 1	ppb	n/a	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Copper (Distribution) (2007)	N	0.59	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (Distribution) (2007)	N	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Fluoride Well #2 (2008) Well #3 (2008)	 N N	 0.35 0.25	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Chromium Well #2 (2008) Well #3 (2008)	 N N	 2.6 3.1	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Nitrate (as Nitrogen) Well # 2 Well # 3	 N N	 < 1.0 < 1.0	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Volatile Organic Contaminants						
TTHM (Distribution)(2007) [Total trihalomethanes]	N	3.32	ppb	0	80	By-product of drinking water chlorination
HAA5 [Haloacetic Acids] (Distribution) (2007)	N	ND	ppb	0	60	By-product of drinking water chlorination
Unregulated Contaminants						
Sodium Well # 2 (2008) Well # 3 (2008)	 N N	 77 76	ppm	n/a	n/a	Erosion of natural deposits
Chloroform Well # 2 (2007) Well # 3 (2007)	 N N	 1.4 ND	ppb	n/a	n/a	By-product of drinking water chlorination

Note: Test results are for year 2009 unless noted otherwise; testing for all contaminants is not required annually.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of St. Michaels is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

NOTE: As can be seen by results listed in the above tables, lead, which is tested for triennial (every 3 years) in accordance with Federal and State Regulations in St. Michaels's distribution system, was not detected in our most recently collected samples.

Our water system recently violated a drinking water standard. Although this was not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation. Our water users and the public were notified of this violation by Public Notification at the time of this occurrence by direct mailing and by posting of this notice in public places such as the Library and St. Michaels Post Office..

We routinely monitor for the presence of contaminants in drinking water. The compliance determination by the Maryland Department of the Environment for 2009/2010 show that our system exceeded the standard, or maximum contaminant level (MCL) for Arsenic. The standard for Arsenic is 10 parts per billion (ppb). The average level of Arsenic over the last four quarters, ending March 31st, 2010, for Plant No. 3 (well #2 – Marengo Street) was 20.8 ppb.

This was not an immediate risk. If it had been, you would have been notified immediately. On January 23, 2006, the new Arsenic Rule became effective. This rule lowered the MCL from 50 ppb to the current level of 10 ppb. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

The following steps have been taken to remedy this situation. The arsenic filtration media has been replaced in both of our plants and maintenance schedules have been adjusted. It should be noted that once regular testing revealed the violation, water from the affected well did not enter the distribution system, The well has been in compliance since March 22nd and is now in use. Quarterly monitoring for arsenic continues on both of our plants.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

THE STAR
1799-2007
DEMOCRAT
SERVING THE MID-SHORE FOR 207 YEARS
EASTON, MARYLAND 21601

6. 13. 10
DATE

PUBLIC NOTICE

TOWN OF ST. MICHAELS
WATER QUALITY REPORT

The Town of St. Michaels is pleased to announce that we have the results of the 2009 annual drinking water report. The report is designed to inform you of the quality of water and services that the Town delivers everyday.

A copy of this report is available at the St. Michaels Town Office, 300 Mill Street, during normal business hours and posted in the St. Michaels Branch of the Public Library and the St. Michaels Post Office.

BY AUTHORITY OF
THE COMMISSIONERS OF ST. MICHAEL

SD 6/13 2165597